

DOCTORS IN UNITED STATES.

To one who observes the considerable number of physicians' signs in the average city or large town the report of the last census that there are in the United States only 130,000 physicians, including osteopaths, psychopaths, hydropaths and doctors of every description, may come as a revelation and a surprise. The additional information, afforded by the census, that this country has only one doctor to every 650 of its population is not likely to relieve the observer's wonderment until he reflects that a physician to every 650 people is, after all, a fairly liberal safeguard to the public health, says the Manchester Union. The figures, of course, represent the average of the country over, some sections of communities having fewer doctors in proportion to their population and some having more. Manchester, for instance, on the basis of the census figures, would have 107 or 108 physicians. The city directory gives 98. The census report on the matter is not incredible, yet a person traveling along the streets of almost any New England city and remarking the numerous doctors' "shingles" would have been almost certain to estimate the percentage of doctors higher than that given by the census.

Surprise is frequently expressed because there are so many school children who are bad spellers, but there is a substantial reason for it. In Kansas very few of a short list of words were spelled correctly by 112 school and college students. Now these pupils are not taught the way their fathers and mothers were, says the Boston Globe. Under the old public school system there were spelling bees in the schools and the pupils took pride in excelling. Under the spelling bee system children between the ages of eight and twelve can acquire quite a large vocabulary by the practice of spelling words of several syllables. The rising generation is full of poor spellers, but it is not their fault, for little attention is paid to that accomplishment. It would be well for all teachers to put their pupils through a course of spelling every few days, and also to teach them to read aloud. Reading, writing and spelling should go hand in hand. Those lacking these accomplishments are not far removed from the illiterate class.

George Wehler, director of physical education at the University of Wisconsin, has instituted rest classes for fidgety girls whose nervous systems "go to pieces" under the fatigue following undue exertion. In a report to the United States Bureau of Education he says: We do not go on the theory that the gymnasium is good for every one, and, therefore, every one must take gymnastics. The purpose of these classes in rest is to teach girls who are restless from the performance of tasks that ought not to produce fatigue how to acquire control over their own nervous systems. Putting every one—girls as well as boys—through a stiff regimen of gymnasium work has had bad results in many instances, and is a thing to be avoided. If the director of physical culture in the University of Wisconsin makes allowance for constitutional differences students not built to endure overstrain will have reason to thank the good fortune which made him arbiter of their physical destinies.

San Francisco custom house officials have just made the first arrest ever recorded at that port for the offense of smuggling diamonds—and the diamonds in the case were valued at only \$477.50. When the New York custom house looks at the San Francisco custom house it will have to laugh.

The assertion that caviare has supplanted the oyster as the appetizing opening of banquet menus may be premature. Hotel managers may prefer the Russian delicacy, but it will be well to hear from "the general" before taking everything for granted. American blue points on the half shell are very good.

A poultry paper tells us that hens stop laying in cold weather because they cannot lay eggs and grow feathers at the same time. As yet no ingenious poultry raiser has tried the experiment of fitting out his hens in the fall with warm red flannel overcoats.

A New York woman called a policeman when a man proposed to her on the street. Perhaps she merely wanted him held until the Massachusetts spinners could get out a requisition for him.

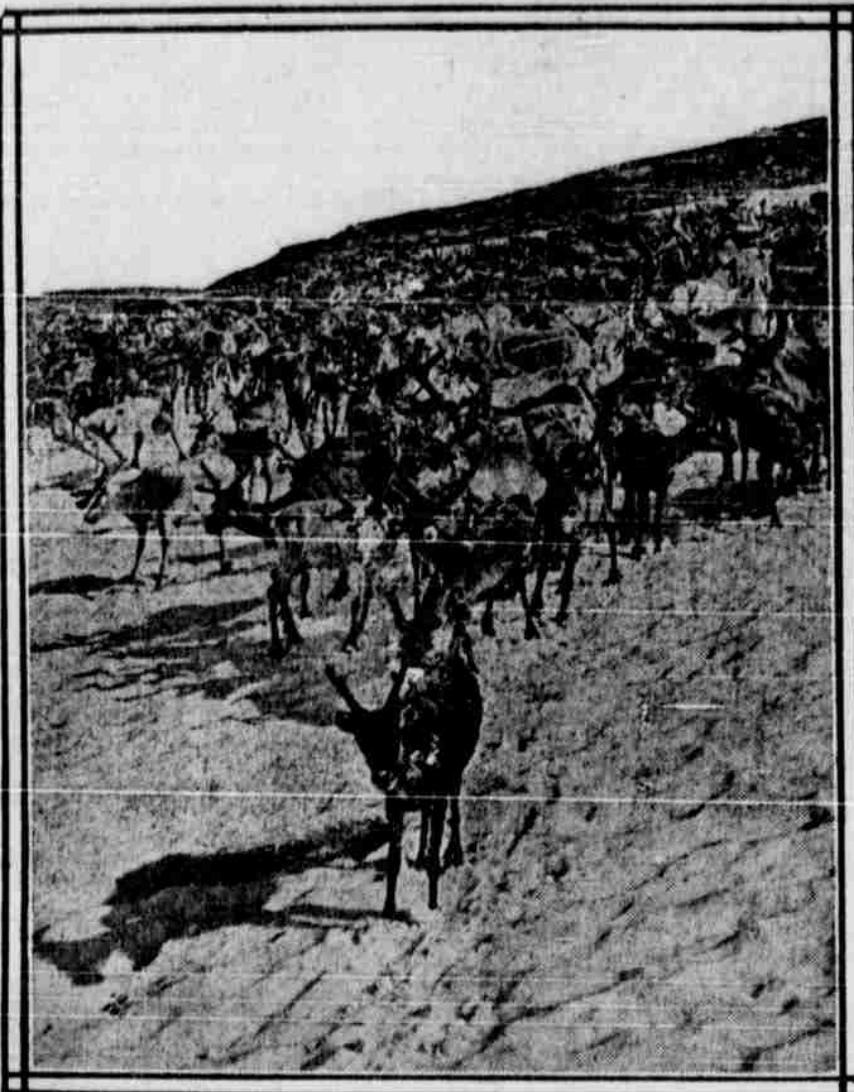
Instances are multiplying in which costly fatal fires have been traced to carelessness with lighted cigarettes or matches. It should be made a minor degree of arson for the careless tossing away of fire in this manner.

Astronomers at Flagstaff, Ariz., have discovered that two of the principal canals on Mars are doubling. The Martian deep water ways commission is bumping itself.

A Princeton graduate is said to be worth \$6 a week just after receiving his diploma. This is not his own estimate, however.

A cocked hat has been more popular so far this year than Medicine Hat.

# UNCLE SAM'S REINDEER



HERD OF REINDEER

THE herding and breeding of domesticated reindeer, introduced as an experiment a number of years ago with animals imported from Siberia by the government, has now become the most prominent feature of the industrial education of the Eskimo and the main activity of many native villages of Arctic Alaska, writes W. L. Beasley in Scientific America. The progress in civilization that has been made by lifting up the natives formerly living as savages and eking out a precarious existence by hunting, with no other domestic animal than the dog, to the estate of civilized, self-supporting herdsmen, as accomplished through the reindeer industry, is a remarkable educational achievement. The Alaska Reindeer Service has now reached its most successful stage, as it marks the beginning of the period of full utilization of all the reindeer owned by the government for the benefit of the native population. At the present time there is hardly a surplus government reindeer north of the Kuskokwim river. This has been made possible by the establishment of new reindeer stations, the employment of more natives as chief herders, by accepting the largest practical number of apprentices, and by transferring reindeer to both chief herders and apprentices, in lieu of salary or supplies, the chief aim and fundamental policy of the government being to turn the reindeer over to the natives as rapidly as they learn the industry and appreciate its value.

The total number of reindeer in Alaska at the last census was nearly 28,000, and of this number, over 11,000 are owned by the natives. One of the most striking and gratifying features is the large income which the natives derive from the sale of reindeer products, their share for the past fiscal year having been \$18,000 and over. The value of the reindeer skins used for clothing, not that of the meat consumed as food. These material benefits and the very considerable income thus derived demonstrates the fact that the reindeer industry has become one of the most prominent factors in the economic life of the Eskimo. The total number of Alaska reindeer is distributed in herds among 28 stations, 18 of these being owned by the government and 10 by church missions. The Lapps own over three thousand. The natives are very anxious to get deer, and look upon them as a safe investment for their earnings, and usually take deer in preference to cash for services, when an opportunity is offered. The government does not sell deer; this is done by natives and missions alone. The various missions are furnished a herd of 100 deer on loan for a period of five years by the government.

**Mission Keeps Increase.** At the end of this time the original number must be returned. The mission keeps the increase of fawns, which amount to several hundred, derived from the government loan. The Moravian mission of Bethel has one of the largest herds, nearly three thousand. Other missions having over one thousand deer, all in Arctic Alaska, north of the Yukon, are located at Golovin, Kotzebue, Shishmaref and Cape Wales. At Barrow, latitude 71 deg. 25 min., the most northern point on the American continent, there is a herd of 300.

The total population here is about 400—men, women and children. One native, Takpuk, is considered the richest man of that region, as he owns a herd of 137 reindeer. The missions support and educate a number of young apprentice herders. The native herders also take on apprentices and award them six deer a year in payment for their services. The Lapps

**Names From Dickens' Characters.** Although Dickens is commemorated in street names abroad there is no street named after him in London. But there is a near approach to it in Copperfield road, Stepney, not far from the People's Palace, and to prove that this was inspired by "David Copperfield," we find a Dora street and an Agnes street in close proximity.

**Petroleum Known to Egyptians.** Ages before the Roman empire petroleum was used by the Egyptians.

landers take a loan of deer for five years from the government, and give their services as instructors for that period. At the end of five years the Lapp returns the 100 deer and becomes an independent herder himself with the large increase of reindeer he has obtained from the herd. The Lapp herders are not interested in the extension of the reindeer among the natives. Some of the largest owners of deer are Lapps, some half a dozen of these men having accumulated herds of from five to nearly eight hundred. In introducing the reindeer as a means to promote the industrial life and to provide a permanent livelihood for the Eskimo, it has been found necessary by the government to put the young natives through a course of training. Those who get their deer directly from the government, serve an apprenticeship of five years.

**Mark to Designate.** In the ear of each government deer a little aluminum button is fastened securely, and all private owners and herders have a mark which must be registered with the local superintendent of the reindeer station and also at Washington. Besides being taught the art of deermanship, the apprentices are instructed in keeping accounts, the methods of marketing reindeer, and in other practical matters connected with the industry. No apprentice can become a herder unless he is proficient in the branches of elementary reading, arithmetic and writing. At the end of his apprenticeship the young Eskimo native is allotted a number of deer by the government, and with the increase obtained during the interval of his five years' service, each apprentice will have, on an average, a herd of 50 reindeer.

As this herd will double itself every three years, the graduate apprentice will have a herd which will afford and assure a self-supporting income quite enough to satisfy the economic wants of himself and family in the future. He is thus established in business by the government and is given free pasture thereafter. The reindeer produces one fawn in the spring each year for 10 years. Among the useful and profitable products of the reindeer are the skins for clothing. Of these pelts most varied use is made. From them are fashioned the tight-fitting trousers and that wonderful outer garment, the "parka," universally worn in winter by both male and female natives and by many whites. The "parka" extends to the knees and has a close-fitting hood, which keeps the head and shoulders comfortably warm even in the severest weather. These reindeer garments are remarkable for their excellent qualities of resisting moisture and cold. A close examination of the hair of the reindeer furnishes an explanation of its peculiar value. The hair is not merely a hollow tubular structure, with a cavity extending throughout its entire length, but is divided, or partitioned off, into exceedingly numerous cells, like watertight compartments. These are filled with air and their walls are so elastic and at the same time of such strong resistance that they are not broken up either during the process of manufacture or by swelling when wet. The cells expand in water and thus it happens that a person completely in garments made of reindeer wool does not sink when in water, because he is buoyed up by the air contained in the hundreds of thousands of hair cells. As the mineral industry continues to grow in Alaska the natives and graduate apprentices can earn high wages as teamsters hauling supplies and furnishing fresh reindeer meat to mining camps in the interior, at points remote from railway and steamboat transportation.

**Less Cost and Trouble.** The average man is more ready to lend his ears to a hard luck story than to lend a hand.

**But Less Valuable in Life.** It is much more easy to win applause by skill, in games than by ability in more valuable pursuits.

**Woman's Best Work.** As a rule women's best work is done by influencing man, and not by competing with him.

## FARM AND GARDEN

### RAISING ONIONS FOR MARKET

Avoid New Land, Get Pure Seed and Cultivate Properly—System of Rotation Is Best.

(By R. G. WEAVERSTONE.) New land is not adapted to onion growing, and this crop should always follow some crop that has been under hoe, and free from weeds. Onions should follow potatoes, beans or corn. The land should be well plowed in the autumn, disked and harrowed in the spring until it is as fine as garden-soil.

Always manure heavily before breaking up the land in the fall. On new land cowpats are excellent for bringing the land into shape.

Onions should be grown under a system of crop rotation, but the crops used in the rotation must be those



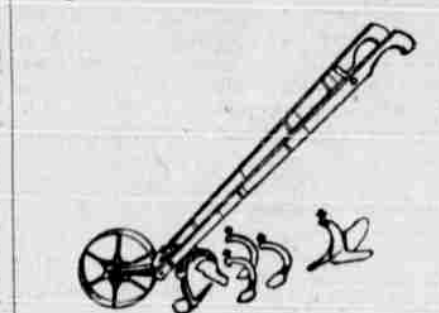
that will not exhaust the high fertility necessary to onions. Continuous cropping with onions will cause the land to become diseased and filled with insect enemies.

One of the most important things in onion-culture is to mix the fertilizer with the soil well. On land that is not thoroughly drained, plow in beds, leaving a double furrow between the beds to carry off surplus water. These beds may be 75 to 150 feet in width.

The disc-harrow puts the land in fine condition after it has been thoroughly plowed in the fall. For finishing the soil a tool is now made, which when drawn over the ground will fill and obliterate all tracks, leaving the surface smooth and even, and in fine condition for either seed or transplanting.

The feeding-roots of the onion run close to the surface, and should not be disturbed by deep cultivation. After a rain, break up the surface of the soil by means of a steel rake. As soon as the plants are growing well, the cultivator should be started and kept going, in order to keep the soil in good condition, and to prevent weeds.

The single wheel-hoe is an excellent tool for this purpose. Some of the large growers near Chicago have adopted a hoe truck, consisting of a



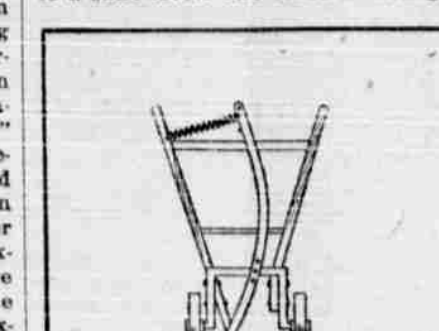
Wheel Hoes Adapted to Working Onions.

pair of light plow-handles, an iron stock, and the front wheel of a bicycle. This is patented. The hand-weeder may be used to good advantage.

### HANDY MACHINE FOR PLANTS

Chopper and Thinner, Newly Patented Implement, Can Be Used Like an Ordinary Cultivator.

A new implement for use in the garden, recently patented, is a chopper and thinner for work among plants. One of the handles of this thinner terminates in a digger, and through a hole just above the digging point passes a blade, which is attached to a shift lever. The blade is arranged



Chopper and Thinner.

to actuate within the hole, a spring, extending between the upper end of the lever and one of the handles, keeping the blade-carrying end of the lever adjacent to the digging point. The machine is pushed along between the rows of plants in the same manner as an ordinary cultivator.

**Raw Phosphate Rock.** The best way to use raw phosphate rock is to apply it with stable manure with soil abounding in vegetable matter. It is particularly useful for soil for long-bearing crops, such as hay and timothy. It is desirable to use 10 pounds of caustic lime with each 100 pounds of the raw phosphate rock, or basic slag meal may be used, as it contains lime.

**Game Birds.** The bulletin just issued by the American Game Protective and Propagation association should be read widely. Facts about the danger of extinction for such familiar sounding creatures as the snipe and the passenger pigeon will make many a man thoughtful about protecting them who wouldn't know one from another.

**Slugs.** Slugs do not injure cattle by rotting their teeth, neither does it cause auterolitis.

### WHAT "CROP ROTATION" DOES

One of Simplest and Most Practical Ways by Which Income of Farm May Be Increased.

The rotation of crops is one of the simplest and most practical ways by which the income of the farm may be increased without greatly adding to the cost of operation.

The rotation of crops is the alternation of the three general classes of farm crops; namely, grain crops, grass crops and cultivated crops, so that a crop from each of the three classes will appear on each field at least once during each cycle of the rotation.

Under "grain crops," such crops as wheat, barley, flax and millet may be classed, in their relation to the soil. Millet, though grown for hay, has practically the same effect on the soil as a grain crop. These crops deplete the soil of vegetable matter, allow weeds to grow, and have a tendency to deplete the productive power of the land.

Under "grass crops" may be included timothy, bromus and the clovers. Though the clovers are not true grasses, they have heavy root systems, and add vegetable matter to the soil. The clovers also add nitrogen to the soil; but their chief value in a rotation seems to be due to the fact that their heavy root-systems fill the soil with vegetable matter, thus making it more hospitable to plants.

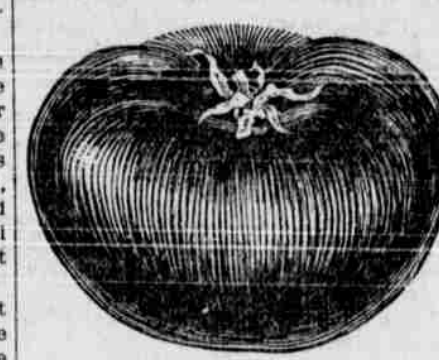
Under cultivated crops may be placed corn, potatoes and root crops. Owing to their cultivation during growth, these crops have a cleaning effect on the soil. They are, however, exhaustive of soil fertility, because the constant cultivation encourages the liberation of large quantities of plant-food. These crops leave the soil in good condition for succeeding grain crops.

### PROPER CARE OF TOMATOES

Trimming of Vines in Mid-Summer Will Greatly Increase Yield—Experiments in Maine.

Very few amateur practice trimming tomato vines, but if this is done in mid-summer the yield of fruit is very greatly increased.

Experiments at the Maine experiment station show that the increase due to



An Excellent Specimen.

trimming reached from 6 to 50 per cent., and the gain by weight was very marked. In one instance reach 58 per cent.

The plants were grown under ordinary field culture and they were started in the green house April 1, planted in the field June 1 and headed back July 24, August 8 and September 5.

At each trimming the leading branches were shortened about six inches and most of the side shoots below the first clusters were removed, the others being shortened, and the sunlight was thus freely admitted.

Training tomatoes on wires to run from five to ten feet high is becoming a common practice. This method increases the yield as the sunlight reaches all of the fruit and makes picking much easier.

### Boxes or Crates for Vegetables.

The bushel box which the Boston vegetable growers use for marketing produce has much in its favor. When making up a load nothing is easier to stow than a box, as one can be placed above another to any desired height, the bottom of each serving as a cover for the one below it. Vegetables can be packed in it much easier than in a basket, as it is of uniform width from top to bottom, and no allowance need be made for slanting sides. But these advantages apply equally well to the bushel crate, which has an additional advantage because of the slatted sides, which permit of more ventilation.

### Hollow-Tile Silo.

The Iowa station has designed a silo built of hollow tile, reinforced between courses of blocks, which is proving very efficient and cheaper in construction than concrete where sand and gravel have to be shipped in.

## GARDEN and FARM NOTES

Kaffir corn makes good silage. Keep the manure spreader busy.

Why not try a patch of alfalfa this season?

Plow the garden deep when you plow it.

A true saying: "A good garden is half the living."

Flax is a plant that does well on a variety of soils.

The well drained garden has many things in its favor.

Millet hay, to give the best results, must not get too ripe.

A good gardener will not be content with raising one crop a year.

The careful stockman gives his manure spreader daily exercise.

Rhubarb is one of the standard garden crops in the vicinity of large cities.

The green food problem in winter isn't much of a problem if there is any alfalfa hay on the place.

All the kernels of an ear of corn are approximately of the same composition, but different ears vary considerably.

## PAPER BAG COOKING

WONDER-WORKING SYSTEM PERFECTED BY M. SOYER, WORLD'S GREATEST LIVING CHIEF

USEFUL HINTS FOR CONVERTS.

By Martha McCulloch Williams. Paper bag cooking is a liberal education in other things besides economy and flavor. It teaches you to beware, also, to take care. The being aware applies particularly to the bags themselves—their care and keeping, no less their use.

If the paper bag habit is firmly established do not keep the bags lying about loose, nor huddled in drawers, nor, worst of all, rolled up or crumpled. A large part of their value is risked by such crumpling. Let them lie flat where it is dry, cool and airy.

To this end get a light wooden box, nail shelves inside it, say two or three inches apart, and hinge on a door, or hang a washable curtain over the shelves, each side separate.

**Roast of Veal.**—Get half a breast of veal, bone it carefully, lay it on a board, skin side down, season with salt and pepper, and spread thickly over it sausage stuffing. To make the stuffing take half pork sausage meat and half well dried bread crumbs and moisten with a beaten egg and enough milk to make it stick together, but not to make it wet. Roll up carefully and tie with clean string, taking care especially to keep the ends close. Rub over with butter or dripping and put in a well buttered bag, laying around it slices of carrot, turnip and onion. Cook for five minutes in a very hot oven, then slack heat, and cook for forty-five minutes more.

**Saute of Chicken with Mushrooms.**—Cut a young tender chicken into joints, trim off all projecting bones, season with salt and pepper—not too highly—and brush over with melted butter. Put into a well-buttered bag with eight large or twelve small mushrooms, cut in slices. Add a pinch of herbs, a very small onion, and half a gill of good white stock. Seal bag tight, give ten minutes in a very hot oven, then thirty in moderate heat. Take up on a hot dish and keep hot while you make the gravy. Take for the gravy the hot liquor from the bag, put it in a bowl with the yolk of an egg beaten up in half a gill of cream. Stir hard over hot water, but do not let boil. When thoroughly blended, pour over the chicken, garnish with chopped parsley, a few mushroom heads and half moons of crisp puff paste. Serve as hot as possible.

**Banana Pudding.**—Beat three eggs light, saving out one white. Add a generous cup of sugar, a cup of stale cake, crumbled fine, half a cup of creamed butter, a cup of milk, beat all together, then add two large or three small bananas, sliced thin, the juice of half a lemon and a teaspoonful of lemon extract. Bake in a very well-buttered bag for thirty minutes. Take out, cover with meringue, strew a little shred candied peel over the meringue, set in the oven to harden, then serve hot with wine or lemon sauce.

(Copyright, 1911, by the Associated Literary Press.)

## Paper Bag Dinner

By M. Soyer, Chef of Brooks' Club, London.

**Filet of Beef a la Miro.**—Take a pound and a half of rump steak and cut it into neat slices, about an eighth of an inch thick and two and a half inches long and broad. Dust each of these lightly with black pepper; melt an ounce of butter and skim it free from froth, and add to it as much finely minced garlic as will lie on the point of a very small knife. Lay the filets in this and let them steep for an hour, turning frequently (the dish must stand in a warm place, or the butter will set). Then take out, put in a well-buttered bag, and place on broiler in the oven, leaving it to cook for half an hour. Meanwhile knead an ounce of flour with an ounce of butter, add to it by degrees a pint of strong well-flavored stock, place in a clean saucepan, and stir all one way until it is the consistency of cream; then add half a pound of previously cooked mushrooms, the juice of half a lemon, freed from seeds, a teaspoonful of China soy, and two drops anchovy essence. Make very hot. Pile the mushrooms in the middle of a hot dish, arrange the filets around it and garnish with a wall of mashed potato. Serve at once.

### GOOD THINGS IF CHEAP.

**Irish Stew.**—Cut up two or three pounds of mutton in the ordinary way. Leave very little fat. Add salt and pepper to taste. Add six large onions, peeled and finely chopped, and two pounds of peeled and thinly sliced potatoes and a bunch of sweet herbs. Place in bag and add half a tumbler of cold water. Place on broiler in hot oven. Allow forty minutes. (Copyright, 1911, by Sturgis & Walton Company.)

**Domination Goes With Steel Manufacture.** English Paper Says, and Proves It.

In the sixteenth century the greatest ironmaking nations were Spain, France and England, and, beyond all fear of contradiction, these were the three countries which were then reckoned greatest. While Cortez was carving the flag of Spain into the then unknown world and while the great galleons were bringing home to that favored nation treasures beyond the wildest hopes of the adventurers, the wildest forges were alight in Catalonia, and the armor of Castile was enabling a handful of men to seize the riches protected by many thousands of natives who had reached a high state of civilization but knew not the methods of manufacture of iron.

And so it ever was, and much as we may in theory and in sentiment regret the fact, so it is today. We hear a great deal about the reasons for the

rise of modern Germany as a world power. It is worth noting that that country has risen rapidly into prominence as the iron and steel output has increased by leaps and bounds. The Romans carried into Spain the knowledge of working iron and steel, and upon that foundation Spain rose to the might and majesty of a great world power.

**Aboriginal Cemetery.** The Australian Minister of External Affairs recently received a wire from Mr. J. P. Beckett, chief inspector of aborigines in the northern territory conveying the news of the discovery of a cave full of dead aborigines.

When traveling thirty miles south of the Roper river the inspector was guided by blacks to a cave hitherto unknown to any white man. Mr. Beckett found the remains of 40 or 50 human beings. It was clear that the bodies were those of aborigines and that they had lain undisturbed for very many years.

## Iron Nations Rule World

Domination Goes With Steel Manufacture, English Paper Says, and Proves It.

rise of modern Germany as a world power. It is worth noting that that country has risen rapidly into prominence as the iron and steel output has increased by leaps and bounds. The Romans carried into Spain the knowledge of working iron and steel, and upon that foundation Spain rose to the might and majesty of a great world power.

**Aboriginal Cemetery.** The Australian Minister of External Affairs recently received a wire from Mr. J. P. Beckett, chief inspector of aborigines in the northern territory conveying the news of the discovery of a cave full of dead aborigines.

When traveling thirty miles south of the Roper river the inspector was guided by blacks to a cave hitherto unknown to any white man. Mr. Beckett found the remains of 40 or 50 human beings. It was clear that the bodies were those of aborigines and that they had lain undisturbed for very many years.